Original

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of:	)	
	)	
Amendment of the Parts 74, 78, and 101	)	ET Docket No. 96-35
of the Commission's Rules to Adopt More	)	
Flexible Standards For Directional	)	
Microwave Antennas	)	

REPLY COMMENTS OF THE NATIONAL SPECTRUM MANAGERS ASSOCIATION

The National Spectrum Managers Association ("NSMA") hereby submits the following reply comments in the above-captioned rulemaking proceeding.[1/] NSMA and the other commentors in the proceeding unanimously support the Commission's proposal to accommodate new antenna designs and applaud the Commission's foresight in addressing this important issue at this time.

To preserve the effectiveness of the fixed service microwave frequency coordination process, NSMA and other commentors in the proceeding strongly urge the Commission to maintain its long-standing requirement that applicants provide proper reference in prior coordination notices ("PCNs") and applications to the actual antenna radiation patterns associated with a proposed fixed service microwave system.[2/] NSMA and an

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[1/] See Notice of Proposed Rulemaking; ET Docket No. 96-35; FCC 96-80 (released March 14, 1996) (the "NPRM").

[2/] See NSMA Comments, at 4-6. See, also, Comments of Alcatel Network Systems, Inc., at 3; Comments of Comsearch, at 2-3. One commentor, 360° Communications Company, appears to imply that specification of antenna gain and antenna beamwidth values are sufficient for frequency coordinators to conduct interference calculations. See Comments of 360° Communications Company, at 1. In fact, as widely recognized by the frequency coordination community, and in the Commission's Rules, the actual antenna radiation pattern for a proposed facility is essential to the conduct of proper interference calculations. See, e.g., 47 C.F.R. § 101.103(d)(2)(ii).

overwhelming majority of the other commentors also urge the Commission to maintain a proper focus on precluding increased levels of interference that may result from the deployment of new antenna designs, and, thus to continue to promote spectral efficiency as a central objective in the prior coordination and licensing of fixed service microwave systems.[3/]

As demonstrated in NSMA's comments, language at paragraph 8 of the NPRM indicates that the Commission may intend to allow fixed service microwave operators to substitute "default" standardized antenna radiation patterns in lieu of actual proposed radiation patterns for use in frequency coordination and application processing. As demonstrated in NSMA's comments, and as confirmed by a number of other commentors,[4/] adoption of this proposal would substantially impair the effectiveness of the prior coordination process, likely result in reduced spectral efficiency, and, thus, would not serve the public interest. Based on the foregoing, the record clearly supports Commission adoption of rules in this rulemaking that maintain the requirement that applicants provide actual antenna-specific information, including radiation patterns where required, in PCNs and in any resulting applications filed before the Commission.

In its comments, Endgate Corporation proposes to modify the Commission's Rules to replace existing maximum effective isotropic transmit power and minimum sidelobe suppression values with a "maximum EIRP envelope".[5/] NSMA is concerned that the

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[3/] See NSMA Comments. See, also, Comments of Alcatel Network Systems, Inc., at 3; Comments of 360° Communications Company, at 2; Comments of Comsearch, at 4; Comments Innova Corporation, at 2; Comments of the Society of Broadcast Engineers, Inc., at 1.

[4/] See Footnote 2, supra.

[5/] See, e.g., 47 C.F.R. §§ 101.113 & 101.115.

adoption of the maximum EIRP envelope proposal forwarded by Endgate Corporation would have an adverse affect on spectral efficiency. Specifically, adoption of such a standard would allow fixed service microwave systems with a mainbeam EIRP that is less than the allowable maximum EIRP to radiate sidelobe EIRP levels that are equivalent to systems operating at the maximum allowable mainbeam EIRP. Such a result would clearly reduce spectral efficiency by substantially increasing the relative potential sidelobe interference into adjacent systems that would be produced by systems not operating at the maximum allowable mainbeam EIRP. Conversely, it also appears that systems operating within the maximum EIRP envelope standard proposed by Endgate Corporation that do not utilize the maximum allowable mainbeam EIRP would be more susceptible to interference as a result of their decreased relative sidelobe performance. For these reasons, NSMA opposes the rule modification proposed by Endgate Corporation and urges the Commission to maintain its current minimum sidelobe suppression standards.[6/]

CONCLUSION

As discussed fully above, the record developed in this rulemaking proceeding supports Commission adoption of final rules that do not mandate discontinuation of the long-established practice of utilizing actual antenna-specific radiation patterns in fixed service microwave frequency coordination and application processing. NSMA also urges

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[6/] NSMA would welcome the participation of Endgate Corporation and any other interested industry party in ongoing NSMA efforts to develop and refine technical standards and procedures that limit interference, promote spectral efficiency, and maximize deployment flexibility for fixed service microwave and other radio systems. In fact, NSMA's Annual Conference begins today, May 13, 1996 at the Ritz Carlton Hotel in McLean, Virginia.

the Commission to maintain existing sidelobe suppression requirements, and to otherwise keep a proper focus on promoting spectral efficiency in considering the adoption of rules to encourage the use of new fixed service microwave antenna technologies.

Respectfully submitted,

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Its President

May 13, 1996

CERTIFICATE OF SERVICE

I, William R. Lye, hereby certify that on the 13th day of May, 1996, a true copy of the foregoing "REPLY COMMENTS OF THE NATIONAL SPECTRUM MANAGERS ASSOCIATION" was mailed, first-class postage prepaid, to the following:

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